

Technical sheet :

MI 100 D ST5



 **MANITOU**
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| Technical characteristics | | | Metric |
|---------------------------|---|-----------|---------------------------|
| 1.1 | Manufacturer | | Manitou |
| 1.2 | Model Name | | MI 100 D ST5 |
| 1.3 | Power source | | Diesel |
| 1.4 | Operator type | | Seated |
| 1.5 | Max. capacity | Q | 10000 kg |
| 1.6 | Load center of gravity | c | 600 mm |
| 1.8 | Load distance, centre of drive axle to fork | x | 726 mm |
| 1.9 | Wheelbase | y | 2800 mm |
| | Standard mast reference of the machine | | FVD 30 |
| Weight | | | |
| 2.1 | Service weight | | 14340 kg |
| 2.2 | Weight on front axle (laden) / rear axle (laden) | | 21885 kg / 2455 kg |
| 2.3 | Weight on front axle (Unladen) / rear axle (Unladen) | | 6790 kg / 7550 kg |
| Wheels | | | |
| 3.1 | Tires type | | Pneumatic |
| 3.2 | Dimensions of front wheels | | 9.00-20-14PR |
| 3.3 | Dimensions of rear wheels | | 9.00-20-14PR |
| 3.5 | Number of front wheels / rear wheels | | 4 / 2 |
| 3.5.2 | Number of drive wheels | | 4 |
| 3.6 | Front wheel gauge | b10 | 1628 mm |
| 3.7 | Rear wheel gauge | b11 | 1700 mm |
| Dimensions | | | |
| 4.8 | Seat height/stand height | h7 | 1350 mm |
| 4.7 | Height of overhead guard (cabin) | h6 | 2580 mm |
| 4.12 | Height of towing bar (coupling height) | h10 | 505 mm |
| 4.19 | Overall length | l1 | 5756 mm |
| 4.20 | Length to face of forks | l2 | 4236 mm |
| 4.21 | Overall width | b1 | 2165 mm |
| 4.21 | Overall width - Twinned wheels | b1 | 2165 mm |
| 4.22 | Forks section / width / length | s / e / l | 80 mm x 160 mm x 1520 mm |
| 4.23 | Fork carriage ISO 2328 (class/form) A/B | | 5A |
| 4.24 | Fork carriage width | b3 | 2100 mm |
| 4.31 | Ground clearance below mast | m1 | 250 mm |
| 4.32 | Ground clearance at centre of wheelbase | m2 | 339 mm |
| 4.33 | Aisle Width for pallets 1000 x 1200 crossways | Ast | 5866 mm |
| 4.34 | Aisle width for 800 x 1200 pallet lengthways | Ast | 6066 mm |
| 4.35 | Turning radius | Wa | 3940 mm |
| 4.36 | Internal turning radius (over tyres) | b13 | 1396 mm |
| Performances | | | |
| 5.1 | Travel speed (laden / unladen) | | 26 km/h-27 km/h |
| 5.2 | Lifting speed (laden / unladen) | | 0.32 m/s-0.34 m/s |
| 5.3 | Lowering speed (laden / unladen) | | 0.43 m/s-0.39 m/s |
| 5.5 | Drawbar pull (Laden / Unladen) | | 7200 daN / 4900 daN |
| 5.7 | Gradeability (laden) | | 28 % |
| 5.10 | Service brake | | Hydraulic |
| | Transmission type | | Torque converter |
| Engine | | | |
| 7.1 | Engine brand / model / norm | | Deutz / TCD 3.6 / Stage V |
| 7.2 | Engine power (Hp / kW) | | 116 Hp/85 kW |
| 7.3 | Rated speed | | 2200 rpm |
| 7.4 | Number of cylinders / Capacity of cylinders | | 4 - 3600 cm³ |
| Miscellaneous | | | |
| 8.2 | Working hydraulic pressure for attachments | | 195 bar |
| 8.3 | Oil flow rate for attachments | | 55 l/min |
| 8.4 | Measured/guaranteed mean noise level at the ear of the operator | | < 84 dB |

MI 100 D ST5 - Dimensional drawing



Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD) | FVD 30 | FVD 33 | FVD 36 | FVD 40 | FVD 45 | FVD 50 |
|--|--------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward | 6.20 | 6.20 | 6.20 | 6.20 | 6.20 | 6.20 |
| β - Mast/fork carriage tilt, backward | 12.20 | 12.20 | 12.20 | 12.20 | 6.20 | 6.20 |
| h1 - Mast lowered height | 2850 | 3000 | 3150 | 3350 | 3650 | 3900 |
| h2 - Mast free lift | 200 | 200 | 200 | 200 | 200 | 200 |
| h3 - Mast lifting height | 3000 | 3300 | 3600 | 4000 | 4500 | 5000 |
| h4 - Mast extended height | 4555 | 4855 | 5155 | 5555 | 6055 | 6555 |
| Residual capacity at max height | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 |
| Height at max capacity | 3000 | 2500 | 3600 | 2500 | 2500 | 5000 |
| Height at max capacity with integrated sideshift | 3000 | | 3600 | | | 5000 |

| Free Lift Triplex (FLT) | FLT 45 | FLT 48 | FLT 50 | FLT 55 | FLT 60 |
|--|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward | 6.20 | 6.20 | 6.20 | 3.20 | 3.20 |
| β - Mast/fork carriage tilt, backward | 6.20 | 6.20 | 6.20 | 6.20 | 6.20 |
| h1 - Mast lowered height | 2850 | 2950 | 3050 | 3200 | 3350 |
| h2 - Mast free lift | 1305 | 1405 | 1505 | 1655 | 1805 |
| h3 - Mast lifting height | 4500 | 4800 | 5000 | 5500 | 6000 |
| h4 - Mast extended height | 6055 | 6355 | 6555 | 7055 | 7555 |
| Residual capacity at max height | 8500 | 8500 | 8200 | 7700 | 7000 |
| Height at max capacity | 4500 | 4800 | 5000 | 5500 | 6000 |
| Height at max capacity with integrated sideshift | 4500 | 4800 | 5000 | 5500 | 6000 |



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